

A CONTRIBUTION TO THE ICHTHYOLOGY OF THE GALAPAGOS.

BY J. T. NICHOLS.

(Figure 11).

The American Museum of Natural History has recently received, through Mr. William Beebe, Director of the Harrison Williams Galapagos Expedition of the Department of Tropical Research, New York Zoological Society, an interesting collection of marine fishes from the Galapagos Islands, made in 1923.

Various fish collections have been made in these islands in past years, but these have been of a fragmentary nature, and the fishes of the islands are still imperfectly known. Two undescribed forms have been found in the present material, and two or three others, known from neighboring seas, deserve special mention, as follows:

Cypselurus nigricans (Bennett). Bennett, 1840, described this flying fish from "both the Atlantic and Pacific Oceans, in lat. 5° N." It is close to *Cypselurus furcatus* (Mitchill) 1815, New York. Recent authors have recognized *furcatus* and *nigricans* as distinct species both occurring in the Atlantic, but it is probable that Atlantic material referred to each is identical; and as the fish to hand agrees with Bennett's description, and is almost certainly what he had from the Pacific, his name is available for it.

It is 215 mm. in length to base of caudal, longest dorsal ray $\frac{1}{2}$ head. Dorsal, 14; anal, 11. Pectorals blackish with a diagonal white stripe and white edging; dorsal pale with a black blotch between the 5th and 11th rays; ventrals pale with slight indication of dusky shading; anal pale; caudal dusky with a pale margin.

Haemulon scudderi (Gill). A specimen about 13 cm. long, from South Seymour I., of this common grunt of the west coast from Mexico to Panama, seems to be the first definite Galapagos record. On *a priori* grounds it was to have been expected there, but not necessarily so, as grunts are not very strong swimmers.

***Eupomacentrus beebei*¹ sp. nov.**

The type, our only specimen, No. 8270, American Museum of Natural History, was collected in a rock pool at Eden, Indefatigable Island, April 1, by the Williams Galapagos Expedition, 1923. It is illustrated in a colored plate in the narrative volume of the Williams Expedition; "Galapagos; World's End," by William Beebe, published by Putnam.

¹ Named for William Beebe in view of his appreciation of the interest and beauty of a tropical reef and its brilliant fishes.

It has a very striking color pattern as follows: in the alcoholic specimen dusky all round including pectoral and lower fins; center of top of head, top of back and spinous dorsal, orange (later fading to whitish); soft dorsal grey with a dusky base. A large black blotch surrounded by a blue ring on last two spines and anterior soft rays of dorsal, and extending onto the back below. Peduncle pale; caudal grey.

Length to base of caudal, 15 mm. Depth in this length, 1.8; head, 2.3. Eye in head, 2.4; interorbital, 3.0; maxillary, 4.5; depth of peduncle, 2.5; pectoral, 1.4; ventral, 1.3; longest dorsal spine, 2.7; longest dorsal ray, 2.1; longest anal ray, 2.2.

Upper and lower profiles of body about equally arched, forehead moderately steep and rounded. Tips of ventrals filamentous. Caudal with a shallow fork. Dorsal XII, 15, anal II, 14. Scales, 29.

There are light blue marks on the head, including a mark from snout to over front of eyes, thence, after a short break, continued back to nape. A spot in the mid-line between the eyes opposite the break in the above-mentioned mark. A blue spot on the base of the soft dorsal, and a blue spot bordered behind with dusky in its axil. Two blue spots followed by a blue stripe on the base of the anal. Some of the scales on sides faintly barred with blue. A color sketch from life has electric blue sides and a scarlet back.

There is nothing like this little fish described in the genus *Eupomacentrus*, where it seems to belong. Young Pomocentrids are at times very deceptive, and it should be noted that we have not seen so small a specimen of *Hypsypops rubicundus*.

Teuthis crestonis (Jordan and Starks).

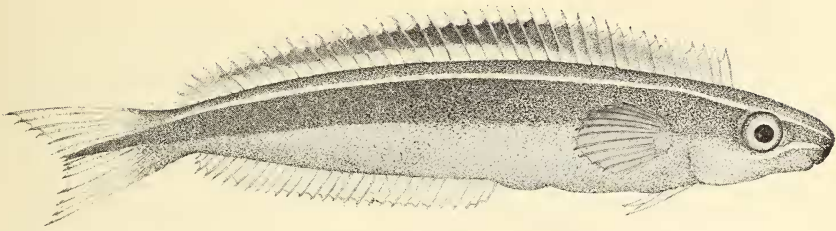
A large surgeon fish from Indefatigable I. falls within probable individual variation for this species, found from Mexico to Panama. Its caudal is well forked, the upper lobe longest and narrow; color all round dusky, except a yellow margin to the pectoral fin.

***Runula albolinea* sp. nov.**

Differs strikingly in color from *Runula azalea* with which it has been directly compared (specimens from Cape San Lucas). No alternate black and white cross marking on the fins as in that species. A narrow white line from over eye to upper caudal origin.

The type, No. 8271, American Museum of Natural History, was collected on Indefatigable Island by the Williams Galapagos Expedition, 1923. It is 43 mm. long to base of caudal. Depth contained 6.5 times in this length; head 4.5; snout and eye equal, 3.5 in length of head; width of mouth, 3.0; pectoral, 1.7; ventral, 2.6; caudal, 1.2; forked for about half its length. Dorsal beginning on the nape; its rays, 41; anal, 28.

Color in alcohol pale greyish to the level of the lower margin of the pupil, white below that line. A narrow white line passing over eye is continued back to the upper caudal origin, and there is another similar white line on the center of the head before dorsal. Dorsal, with a narrow pale edge subtended by a dusky stripe which broadens to tinge all but the base of the central half of the fin; other fins pale.

FIG. 11. *RUNULA ALBOLINEA* sp. nov.

A second example is of the same size and similar in every respect. Four other specimens measure from 35 to 46 mm. in standard length. The largest of these, which has been figured by Miss Isabel Cooper, is somewhat deeper. The color pattern of all is the same. All are from Conway Bay, on the northwest coast of Indefatigable Island, which island is also the type locality of *R. azalea*. It would seem more probable that the *Runula* from the coast would differ from that in the islands, than that a second species should occur in the islands where *R. azalea* was originally described. However, Cape San Lucas material examined agrees with the type description of *azalea*, and *albolinea* neither with that description nor with Cape San Lucas material.

This is one of the series of scientific papers of the Harrison Williams Galapagos Expedition, under the directorship of William Beebe, sent out by the Department of Tropical Research of the New York Zoological Society. The general account and narrative of the expedition, together with the natural history and photographs of the fauna, are embodied in a volume by William Beebe, published by G. P. Putnam's Sons, under the auspices of the Zoological Society. Its title is "Galapagos; World's End."